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United States Patent [19]**Griffith****[11] Patent Number: 5,132,453****[45] Date of Patent: Jul. 21, 1992**

- [54] **N⁶-(HYDRAZINOIMINOMETHYL)LYSINE AND METHOD OF INHIBITING NITRIC OXIDE FORMATION IN BODY**
- [75] Inventor: **Owen W. Griffith**, New York, N.Y.
- [73] Assignee: **Cornell Research Foundation, Inc.**, Ithaca, N.Y.
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- [52] U.S. Cl. **562/560; 435/106; 435/240.31; 514/565**
- [58] Field of Search **562/560**
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Primary Examiner—Michael L. Shippen

[57] ABSTRACT

Physiologically active N⁶-(hydrazinoiminomethyl)lysine or pharmaceutically acceptable acid addition salt thereof is administered in a nitric oxide synthesis inhibiting amount to a subject in need of such inhibition (e.g., a subject with low blood pressure, e.g., due to sepsis or to therapeutic administration of cytokines, or needing immunosuppressive effect) or is added to a medium containing isolated organs, intact cells, cell homogenates or tissue homogenates in an amount sufficient to inhibit nitric oxide formation to elucidate or control the biosynthesis, metabolism or physiological role of nitric oxide. Compared to known nitric oxide synthesis inhibitors, N⁶-(hydrazinoiminomethyl)lysine and its acid addition salts show a greater relative activity toward inducible isoform of nitric oxide synthase than toward constitutive isoform of nitric oxide synthase. N⁶-(hydrazinoiminomethyl)lysine and its pharmaceutically acceptable acid addition salts are substantially less toxic than are NG-aminoarginine and its pharmaceutically acceptable acid addition salts.

5 Claims, 3 Drawing Sheets